

("STAs") and applications for new, modified, or extended authority that may be filed or granted prior to the consummation of the transaction.<sup>1</sup>

ORBIMAGE License Corp. is financially, technically and legally qualified to be a Commission licensee. Its fitness as a Commission licensee, and its ability to operate earth exploration satellites, is well established.<sup>2</sup> Further, as discussed more fully below, the Proposed Transaction will serve the public interest, convenience and necessity by creating efficiencies that do not currently exist in the earth imagery business.

## II. COMPETITIVE DESCRIPTION AND PUBLIC INTEREST BENEFITS

Section 310(d) of the Communications Act and the Commission's rules require applicants for consent to assign licenses to show that grant of the applications is consistent with the "public interest, convenience and necessity."<sup>3</sup> In evaluating proposed transactions, the Commission "employs a balancing process weighing any potential public interest harms of the Proposed Transaction against any potential public interest benefits."<sup>4</sup> The Commission's analysis is "informed by . . . antitrust principles," but also considers the specific benefits of a transaction, including "the quality of services" and "the provision of new or additional services to consumers."<sup>5</sup>

---

<sup>1</sup> Space Imaging currently has pending applications to modify the licenses of earth stations E960463, E970354, E970270, and E970271 by reducing the minimum operating elevation angles for receive-only operations.

<sup>2</sup> See *Orbital Imaging Corporation*, Order and Authorization, 14 FCC Rcd 2997 (Int'l Bur. 1999).

<sup>3</sup> 47 U.S.C. § 310(d).

<sup>4</sup> Applications of Nextel Communications, Inc. and Sprint Corporation, *Memorandum Opinion and Order*, WT Dkt. No. 05-63, FCC No. 05-148, rel. Aug. 8, 2005, ¶ 20.

<sup>5</sup> *Id.*, ¶¶ 21, 22.

Viewed in this context, it is evident that approval of the Proposed Transaction will serve the public interest. The global earth imaging market is highly competitive. The Proposed Transaction will not result in undue market concentration or anticompetitive effects. Rather, it will allow ORBIMAGE to realize certain efficiencies and other benefits, including cost savings, that will enable ORBIMAGE better to serve its customers. In addition, the Proposed Transaction will advance the Commission's pro-competitive policies and will serve the public interest in other significant respects.

**A. The Proposed Merger Will Not Harm Competition**

**1. The Development of the U.S. Earth Imaging Business**

The U.S. commercial earth imaging satellite firms exist by virtue of the actions and policies of the United States government. Indeed, the government deliberately created a private U.S. satellite segment to ensure the availability of vital imaging for national security and other purposes. Over time, the U.S. government has shaped the segment by dictating, among other things, the number of participating firms and how much imagery the government would buy from each firm. This process began when Congress passed the Landsat Remote Sensing Policy Act of 1992, which recognized that private satellite systems required government support in order to survive and which created an independent licensing scheme administered by the National Oceanic and Atmospheric Administration ("NOAA").

In 1994, President Clinton signed a Presidential Decision Directive authorizing U.S. commercial companies to compete by developing more competitive and sophisticated services.<sup>6</sup> As a result of the 1994 Directive, Space Imaging was born. The federal government's

---

<sup>6</sup> See *Presidential Decision Directive/National Security Council (NSC) NSC-23, U.S. Policy on Foreign Access to Remote Sensing Space Capabilities*, dated March 9, 1994.

commitment to sustaining and enhancing the commercial earth imaging industry was further strengthened by President Bush in 2003.<sup>7</sup> The earth imagery satellite arena remains heavily dependent upon, and is closely regulated by, NOAA and other federal agencies. In fact, the U.S. government is the largest customer of U.S. earth imaging companies. More than fifty percent of both ORBIMAGE's and Space Imaging's imagery revenues are derived from U.S. government business.

The National Geospatial Intelligence Agency ("NGA"), an agency of the Department of Defense, awards contracts to ensure the availability of high-resolution satellite imagery to meet U.S. government needs, including vital intelligence requirements. These contracts provide a subsidy toward the construction and launch of high-resolution satellites and provide for the government's purchase of a substantial amount of images. The "ClearView" program was created to ensure the availability of high-resolution satellite imagery of 1.0 meter or better. Between 2003 and 2004, NGA awarded ClearView contracts to Space Imaging, DigitalGlobe, and ORBIMAGE. The ClearView contracts generally will expire over the next two years, subject to some limited options to renew.

NGA created the "NextView" program to ensure the availability of next-generation high-resolution satellite imagery of 0.5 meter or better. Like ClearView, these contracts are intended both to purchase imagery and to support construction and launch of the next-generation satellites. In 2003 and 2004, NGA decided to award only two NextView contracts. DigitalGlobe, Space

---

<sup>7</sup> See *U.S. Commercial Remote Sensing Space Policy*, White House News Release, dated May 13, 2003 (the "*U.S. Policy*"), available online at <http://www.whitehouse.gov/news/releases/2003/05/20030513-8.html>.

Imaging and ORBIMAGE each submitted bids for a NextView contract. DigitalGlobe and ORBIMAGE were awarded contracts; Space Imaging was not.

In creating the NextView program, NGA made a conscious decision to award only two earth imaging contracts instead of the three contracts that had been awarded under the ClearView program. NGA determined that for competitive and risk prevention reasons, two U.S. suppliers would be enough to serve the needs of the U.S. government going forward.<sup>8</sup>

As a result, Space Imaging is not positioned to be a strong competitive force in the industry and, absent the Proposed Transaction, would be forced to exit the earth imagery business. Space Imaging's owners, Lockheed Martin Corporation and Raytheon Company, decided in 2002 that they would not make any further investment in the company. Consequently, Space Imaging was forced to depend on the NextView program to provide substantial financial support for deployment of its next-generation satellite system. After losing both NextView contracts, Space Imaging was left with no source of funding for the deployment of additional satellites. Without funding from the government or its owners, Space Imaging cannot compete against global imaging companies that have strong balance sheets or are backed by supportive investors or foreign governments. Nor could the capital markets be expected to provide the necessary financing if Space Imaging were to attempt to continue on a stand-alone basis without the reassurance of a government contract. Thus, Space Imaging cannot afford to launch a new satellite after its existing IKONOS satellite ceases operation, which is expected to

---

<sup>8</sup> See Transcript of NGA Press Conference with Jaan Loger, Director of InnoVision, and Sandy Jacks, NGA Program Manager (Oct. 1, 2004), at page 3 (Loger stating "When we first worked on this [national policy] over a year ago, we concluded that two was sufficient on two grounds. [O]ne...is the need, the desire for competition. And the other one is frankly a risk prevention measure on our part.").

occur in the first quarter of 2008. If the Proposed Transaction is not consummated, Space Imaging will continue operations to fulfill its current long-term contracts, but will exit the industry when its satellite goes out of service. Moreover, if Space Imaging's cash flow falls below an amount necessary to sustain its operations, the current owners will have little choice but to shut the company down.

## 2. Market Definition: Global Earth Imaging

The market in which Space Imaging and ORBIMAGE compete is the global earth imaging industry, which includes images of the Earth taken from satellites or airplanes.<sup>9</sup> Domestic and foreign satellite firms and aerial imagery firms create and sell images across national boundaries to a wide range of customers, including the U.S. government, foreign governments, and domestic and foreign commercial firms, making it a true global market. Market definition depends crucially on demand substitution factors, that is, the degree to which consumers view products as substitutable.<sup>10</sup> Consumers of earth imagery have a variety of choices and can easily substitute between satellite and aerial imagery or between U.S. satellite and foreign satellite imagery. With limited exceptions, there are almost no barriers to any provider offering imagery to any potential customer, so Space Imaging and ORBIMAGE compete against all other providers around the world. In the relevant market of global earth imaging, ORBIMAGE and Space Imaging have a very small market share.

---

<sup>9</sup> See *Frost & Sullivan*, GIS Software Data and Value-Added Services Markets, A440-22 (2003) (defining the industry as "World Commercial Remote Sensing Imagery") ("Frost & Sullivan Report").

<sup>10</sup> See *Horizontal Merger Guidelines*, U.S. Department of Justice and Federal Trade Commission (1997) at §1.1. See also *Cingular-AT&T Wireless Order*, 19 FCC Rcd at 21557 ¶ 71; *Applications of Western Wireless Corp. and ALLTEL Corp.*, WT Docket No. 05-50, Memorandum Opinion and Order, FCC 05-138, 2005 WL 1693557, ¶¶ 60-64 (rel. July 19, 2005) (where Commission defines relevant product market by considering whether one product is a reasonable substitute for another product).

While the U.S. government is the largest customer of U.S.-based firms, in practice there is little difference between the U.S. government and other customers of earth imaging products. While the U.S. government has offered long-term contracts to U.S. satellite providers, it can (and does) purchase imagery from a variety of sources, just like commercial customers. Indeed, the availability of imagery from a wide variety of sources provides competitive options for both the government and commercial customers.

### 3. Many Suppliers Compete in the Global Earth Imaging Industry

Numerous imaging satellites have been and continue to be launched. These systems compete internationally to provide imagery in a cost-efficient manner. Imagery suppliers across the globe vie for customers, including U.S. defense and intelligence agencies and commercial customers. Several foreign satellites firms, including Spot Image, a French company, as well as satellite firms supported by Israel and India, currently provide images to the U.S. government and domestic commercial customers. Seventeen countries have launched a total of twenty-five remote-sensing satellites.<sup>11</sup> In addition, subject to certain limitations, the U.S. government may turn to its classified satellites to meet its own non-classified earth imagery needs.<sup>12</sup>

---

<sup>11</sup> See William E. Stoney, *A Guide To The Global Explosion of Land-Imaging Satellites: Markets and Opportunities*, EARTH IMAGING JOURNAL, January/February 2005, at 10.

<sup>12</sup> U.S. government use of its own satellites is subject to the limitation that hyper-high-resolution spy satellites may not be used to image the United States, but a significant portion of the purchased imagery is of non-U.S. locations.

Besides foreign satellite systems, aerial imagery suppliers are a strong competitive force in the earth imaging industry. Aerial imagery can provide higher resolution and more precise imagery of areas over which airplanes can fly, and may be more cost-competitive than satellite imagery because the capital costs of aerial photography are relatively low. Aerial imagery is a particularly strong alternative for commercial customers, who tend to be more interested in places that do not have restricted air space. Aerial imagery suppliers currently hold approximately 60% of the overall earth imaging market. Based on information in the 2003 *Frost & Sullivan Report*, coupled with ORBIMAGE's and Space Imaging's estimates of industry growth and their own revenues, the applicants believe that their combined market share for 2005 will represent approximately 13% of the total value of images supplied globally.

#### 4. Many Competitors Are Entering the Industry

Several new satellites will be launched over the next few years, which will further strengthen competition in the global earth imagery industry. First, DigitalGlobe and ORBIMAGE will launch their next-generation satellites, supported by the U.S. government through NGA. The satellites will be more sophisticated, have larger cameras, provide greater capacity, and offer more maneuverability than the companies' existing satellites. In addition, more than seven foreign satellites are expected to be launched over the next two years, most of which will offer next-generation high-resolution imagery.<sup>13</sup> Korean, Japanese, and British systems are planned to be launched later this year, while Taiwanese, Israeli, and Indian satellites likely will launch in 2006.<sup>14</sup> Another high-resolution French satellite will be deployed in 2007,

---

<sup>13</sup> See William E. Stoney, *A Guide To The Global Explosion of Land-Imaging Satellites: Markets and Opportunities*, EARTH IMAGING JOURNAL, January/February 2005, at 10-11.

<sup>14</sup> *Id.*

and other systems will be forthcoming.<sup>15</sup> These satellites and many others will provide ample alternatives to the imagery products and services offered by ORBIMAGE and Space Imaging.

Moreover, there are no regulatory barriers if commercial or governmental entities desire to launch additional satellites. Due to the nature of the Earth Exploration Satellite Service, there is no spectrum or orbital scarcity to inhibit entry into the industry.<sup>16</sup> As a consequence, to the extent the market is attractive to additional entrants, they will be able to enter the market and compete with existing providers.

**5. The Relevant Time Frame for Analyzing Any Potential Competitive Effects of the Proposed Transaction Is Very Short**

As shown above, the Proposed Transaction will not have any anticompetitive effects in the earth imaging market because there is vigorous and growing competition in the industry. Even if the Commission were to conclude that there was the potential for the Proposed Transaction to have such effects, however, the limited remaining life of IKONOS and the large number of Space Imaging customers that have locked in contracts for their imagery needs means that any competitive effects would be short term.

First, the life of the IKONOS satellite is limited, and consequently so is the period of any potential competitive effects. As noted above, Space Imaging expects the satellite to go out of service in the first quarter of 2008, less than two and a half years from now, and Space

---

<sup>15</sup> *Id.*

<sup>16</sup> EESS spectrum allocated at 8025-8400 MHz, which traditionally has been used by earth imaging satellite systems, can easily accommodate additional systems. Moreover, the International Telecommunications Union and the Commission recently provided for a primary EESS allocation at 25.5-27.0 GHz to accommodate the future needs of the earth imagery industry.



Imaging lacks the resources to replace it. This means that, regardless of the Commission's action in this proceeding, Space Imaging will be unable to provide any new images at that time, and likely will go out of business on or before that date. Thus, to the extent that the Commission believed that any competitive harm could result from this transaction, it could not extend beyond the first quarter of 2008.

The likelihood of harm to satellite imagery customers is further reduced because many Space Imaging customers obtain their imaging through long-term agreements that have locked in the rates they pay. These agreements, with the U.S. government and other customers, account for approximately forty percent of Space Imaging's projected revenues for the next two and a half years. The terms of these agreements do not permit Space Imaging to raise its rates, so there is no potential for these customers to be charged more than they already have agreed to pay. Moreover, as shown above, during the short period of relevance here, any potentially affected customers would have a wide range of alternatives, ranging from aerial photography to images from DigitalGlobe or one of the foreign competitors in the market, rendering the likelihood and magnitude of any competitive harm extremely small.

**B. The Proposed Transaction Will Benefit the Public Interest By Creating Efficiencies and Improving Services**

*The Proposed Transaction will create administrative and operational efficiencies and other public interest benefits.*

**1. Increased Efficiency in Coverage and Reliability**

The acquisition of Space Imaging provides an immediate opportunity to afford customers the benefits of the integrated operation of multiple imagery satellites.

ORBIMAGE will be able to provide customers with the benefits of using IKONOS and

OrbView-3; when the NextView program's OrbView-5 is launched, it will also be added into the mix. The benefits include more frequent revisit times (which will reduce both latency and the impact of weather), and more timely coverage of an area of interest. The combination of the two companies also provides the opportunity to provide continuity of direct downlink service to the overseas customers of both companies through the redundancy brought about by the two existing satellites. All of these advantages will be enhanced by the addition of OrbView-5 when it is launched in 2007.

## **2. Technical Expertise**

After the transaction, customers of ORBIMAGE will benefit from the addition of Space Imaging's highly skilled and trained technical personnel to ORBIMAGE's staff. Space Imaging currently has more than 172 employees with expertise and experience largely different from, and often more extensive than, that of ORBIMAGE's personnel. Bringing Space Imaging's substantial expertise to bear will allow ORBIMAGE to combine the best thinking of its current technical staff with the insights of the Space Imaging team to increase the quality of its service and to drive technological innovation.

Moreover, since the announcement in 2002 by Space Imaging's investors that they would not continue to fund the company, Space Imaging has lost many of its employees to other businesses. The Proposed Transaction will stem the loss of human capital and enable ORBIMAGE and its customers to benefit from the knowledge and skills of these experienced employees.

## **3. Utilization of Space Imaging's Image Archive**

ORBIMAGE will gain access to Space Imaging's archive of images, which are of

great value to customers globally. Space Imaging currently sells forty to fifty percent of its imagery from the archive, which is nearly ten times the size of ORBIMAGE's archive and which covers a larger percentage of the Earth than ORBIMAGE's archive. Once the acquisition is complete, customers will be able to select from the most extensive archives in the industry. Further, the public will benefit from the continued availability of these archives, which will be maintained by a strong company. Absent the Proposed Transaction, it is possible that the archive could be lost when Space Imaging shuts down, depriving customers of this important resource.

#### **4. Combined Value-Added Processing Capability**

ORBIMAGE offers its customers significant value-added processing services, which include the imposition of features such as roads and facilities onto images to create maps and similar products. By offering these services for images produced by IKONOS, ORBIMAGE will be able to provide additional value to customers who purchase Space Imaging's imagery. ORBIMAGE devotes significant resources to its processing services, with 55 employees dedicated to imagery processing. By comparison, Space Imaging dedicates only five or six employees to imagery processing. Thus, the combination of Space Imaging's large archive of images and ORBIMAGE's superior processing capability will greatly benefit customers by making a wider range of value-added processing services available to them.

#### **5. Continuation of Strong Foreign Customer Relationships**

Space Imaging has developed many strong relationships with foreign customers and has achieved global recognition for its imagery products and services that surpasses that of ORBIMAGE. For instance, Space Imaging has established fourteen regional affiliates in other nations, compared to only three equivalent relationships for ORBIMAGE. The Proposed Transaction will allow ORBIMAGE to use Space Imaging's strong international ties to increase

its international business. Absent the Proposed Transaction, these international customers may well turn to the increasing number of foreign providers when Space Imaging ceases operations.

#### 6. Cost Savings

ORBIMAGE also will benefit from Space Imaging's cost-efficient business model, which allows it to produce images with a rate of overhead well below the industry average. In addition, the Proposed Transaction will allow the combined companies to realize cost savings through the consolidation of redundant capabilities. These cost savings can be passed on to customers in the form of lower prices for imaging products and services, and will allow the combined company to compete more effectively with foreign providers in the global earth imaging market.

#### 7. Advancement of Other Important U.S. Policy Goals

Finally, the Proposed Transaction also will promote important U.S. policy goals. The *U.S. Commercial Remote Sensing Space Policy* noted that the "[c]ontinued development and advancement of U.S. commercial remote sensing space capabilities . . . is essential to sustaining the nation's advantage in collecting information from space."<sup>17</sup> The *U.S. Policy* also observed that "to maintain a robust U.S. commercial remote sensing industry, we must enhance the international competitiveness of the industry."<sup>18</sup> Authorizing ORBIMAGE and Space Imaging to consummate this transaction will permit the creation of a new, vigorous earth imaging company positioned to compete more effectively than ORBIMAGE or Space Imaging could compete independently in the global marketplace. It also will help maintain U.S. leadership in

---

<sup>17</sup> See the *U.S. Policy*.

<sup>18</sup> *Id.*

advanced earth exploration satellite systems and services and ensure that U.S. companies remain in the forefront of the global satellite industry.

### **III. CONCLUSION**

In sum, the Proposed Transaction will allow ORBIMAGE to achieve efficiencies that are necessary for it to compete in the ever-expanding global earth imaging industry. In addition, the transaction will help to preserve and enhance the products and services offered by both companies for all current and prospective customers. For all the foregoing reasons, ORBIMAGE and Space Imaging respectfully submit that the proposed assignment of Space Imaging's FCC licenses will serve the public interest and request that the Commission expeditiously grant its consent.

**Exhibit A**  
**Response to Item 24**  
**Additional Frequency Use**

In addition, the space craft uses frequencies in the 2 GHz band for TT&C. Specifically, it uses channels at 2042 MHz and 2052 MHz for this purpose.

**Exhibit B**  
**Response to Item 40**  
**Ownership and Control of ORBIMAGE**

The Applicant, ORBIMAGE License Corp., a Delaware corporation, is a wholly-owned subsidiary of ORMIMAGE Inc., a Delaware Corporation. ORBIMAGE Inc. is a wholly-owned subsidiary of ORBIMAGE Holdings Inc. (the "Parent Company"), which also is a Delaware Corporation. As of October 3, 2005, the persons and entities holding ten percent or more of the voting stock of the Parent Company, are as follows:

**Table 1**  
**Ten percent stockholders**

Name	Address	Percentage held	Citizenship
Harbert Distressed Investment Master Fund, Ltd <sup>1</sup>	C/O International Fund Services (Ireland) Limited Third Floor Bishop's Square, Redmond's Hill Dublin 2, Ireland	38.8% <sup>2</sup>	Cayman Islands <sup>3</sup>

The Communications Act does not restrict foreign ownership of Earth exploration satellite licensees. *See* 47 U.S.C. § 310(b). Nor does it contravene the broader public interest to permit

---

<sup>1</sup> Harbert Distressed Investment Master Fund, Ltd (the "Master Fund") is a private equity fund. The sole investment manager of the Master Fund is HMC Distressed Investment Offshore Manager, L.L.C. ("HMC Management"), a Delaware LLC. HMC Investors, L.L.C., a Delaware LLC, is the managing member of HMC Management. The address of HMC Management is 555 Madison Avenue, 16th Floor, New York, NY 10022. The applicant believes that substantially all of the investors in the Master Fund are domiciled in the United States, but does not have specific information as to the investors in the Master Fund.

<sup>2</sup> This percentage includes all shares beneficially held by the Master Fund, some of which may be through one or more intermediaries, of which the applicant is unaware.

<sup>3</sup> The Master Fund is a Cayman Islands company with a principal place of business in Dublin, Ireland. *See also* note 1, above. The Master Fund's holdings are the sole "foreign" holdings of which the Applicant is aware.

such foreign holdings of a satellite licensee, or any other licensee. *See, e.g. Petition of Paradise Merger Sub Inc. for Declaratory Ruling, Declaratory Order and Ruling, DA 05-170 (Policy Div. Int'l Bur., rel. Jan. 25, 2005) (permitting substantial foreign ownership, through offshore private equity funds, of a common carrier radio licensee).*

The names and addresses of the officers and directors of the Applicant are as follows:

**Table 2**  
**Officers and Directors of ORBIMAGE**

<b>Name</b>	<b>Position</b>	<b>Address</b>	<b>Citizenship</b>
James A. Abrahamson	Chairman of the Board, Director	21700 Atlantic Blvd. Dulles, VA 20166	United States
Matthew M. O'Connell	President and Chief Executive Officer, Director	21700 Atlantic Blvd. Dulles, VA 20166	United States
Joseph M. Ahearn	Director	21700 Atlantic Blvd. Dulles, VA 20166	United States
Talton R. Embry	Director	21700 Atlantic Blvd. Dulles, VA 20166	United States
Lawrence A. Hough	Director	21700 Atlantic Blvd. Dulles, VA 20166	United States
John W. Pitts	Director	21700 Atlantic Blvd. Dulles, VA 20166	United States
William W. Sprague	Director	21700 Atlantic Blvd. Dulles, VA 20166	United States
William Schuster	Chief Operating Officer	21700 Atlantic Blvd. Dulles, VA 20166	United States
Timothy J. Puckorius	Senior Vice President, Worldwide Marketing & Sales	21700 Atlantic Blvd. Dulles, VA 20166	United States
William L. Warren	Vice President, General Counsel and Secretary	21700 Atlantic Blvd. Dulles, VA 20166	United States